IFW16

RAW SEQUENCE LISTING DATE: 09/03/2004
PATENT APPLICATION: **US/09/807,742B** TIME: 11:05:49

Input Set : **A:\CHL-T104XC1.ST25.txt**
Output Set: **N:\CRF4\09032004\I807742B.raw**


```
      3 <110> APPLICANT: Daniell, Henry
      5 <120> TITLE OF INVENTION: Pharmaceutical Proteins, Human Therapeutics, Human Serum
Albumin
      6       Insulin, Native Cholera Toxic B Submitted on Transgenic Plastids
      8 <130> FILE REFERENCE: CHL-T104XC1
     10 <140> CURRENT APPLICATION NUMBER: US 09/807,742B
     11 <141> CURRENT FILING DATE: 2001-04-18
     13 <150> PRIOR APPLICATION NUMBER: PCT/US01/06288
     14 <151> PRIOR FILING DATE: 2001-02-28
     16 <160> NUMBER OF SEQ ID NOS: 26
     18 <170> SOFTWARE: PatentIn version 3.2
     20 <210> SEQ ID NO: 1
     21 <211> LENGTH: 1250
     22 <212> TYPE: PRT
     23 <213> ORGANISM: Artificial sequence
     25 <220> FEATURE:
     26 <223> OTHER INFORMATION: Protein-based polymer (PBP) made from synthetic genes.
     28 <400> SEQUENCE: 1
     30 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
     31 1               5                  10                  15
     34 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
     35             20                  25                  30
     38 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
     39         35                  40                  45
     42 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
     43     50                  55                  60
     46 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
     47 65                  70                  75                  80
     50 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
     51                 85                  90                  95
     54 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
     55             100                 105                 110
     58 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
     59         115                 120                 125
     62 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
     63     130                 135                 140
     66 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
     67 145                 150                 155                 160
     70 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
     71                 165                 170                 175
     74 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
     75             180                 185                 190
     78 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
     79         195                 200                 205
```

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```
82 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
83     210                 215                 220
86 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
87 225                 230                 235                 240
90 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
91                 245                 250                 255
94 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
95             260                 265                 270
98 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
99         275                 280                 285
102 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
103     290                 295                 300
106 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
107 305                 310                 315                 320
110 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
111                 325                 330                 335
114 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
115             340                 345                 350
118 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
119         355                 360                 365
122 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
123     370                 375                 380
126 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
127 385                 390                 395                 400
130 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
131                 405                 410                 415
134 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
135             420                 425                 430
138 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
139         435                 440                 445
142 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
143     450                 455                 460
146 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
147 465                 470                 475                 480
150 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
151                 485                 490                 495
154 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
155             500                 505                 510
158 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
159         515                 520                 525
162 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
163     530                 535                 540
166 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
167 545                 550                 555                 560
170 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
171                 565                 570                 575
174 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
175             580                 585                 590
178 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
```

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```
179          595                 600                 605
182 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
183      610                 615                 620
186 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
187 625                 630                 635                 640
190 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
191                 645                 650                 655
194 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
195             660                 665                 670
198 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
199          675                 680                 685
202 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
203      690                 695                 700
206 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
207 705                 710                 715                 720
210 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
211                 725                 730                 735
214 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
215             740                 745                 750
218 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
219          755                 760                 765
222 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
223      770                 775                 780
226 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
227 785                 790                 795                 800
230 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
231                 805                 810                 815
234 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
235             820                 825                 830
238 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
239          835                 840                 845
242 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
243      850                 855                 860
246 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
247 865                 870                 875                 880
250 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
251                 885                 890                 895
254 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
255             900                 905                 910
258 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
259          915                 920                 925
262 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
263      930                 935                 940
266 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
267 945                 950                 955                 960
270 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
271                 965                 970                 975
274 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
275             980                 985                 990
```

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```
278 Gly Val Pro Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
279         995                 1000                 1005
282 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
283     1010                 1015                 1020
286 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
287     1025                 1030                 1035
290 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
291     1040                 1045                 1050
294 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
295     1055                 1060                 1065
298 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
299     1070                 1075                 1080
302 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
303     1085                 1090                 1095
306 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
307     1100                 1105                 1110
310 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
311     1115                 1120                 1125
314 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
315     1130                 1135                 1140
318 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
319     1145                 1150                 1155
322 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
323     1160                 1165                 1170
326 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
327     1175                 1180                 1185
330 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
331     1190                 1195                 1200
334 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
335     1205                 1210                 1215
338 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
339     1220                 1225                 1230
342 Val Pro  Gly Val Gly Val Pro  Gly Val Gly Val Pro  Gly Val Gly
343     1235                 1240                 1245
346 Val Pro
347     1250
350 <210> SEQ ID NO: 2
351 <211> LENGTH: 6
352 <212> TYPE: PRT
353 <213> ORGANISM: Artificial Sequence
355 <220> FEATURE:
356 <223> OTHER INFORMATION: Illustrative endoplasmic reticulum retention signal
358 <400> SEQUENCE: 2
360 Ser Glu Lys Asp Glu Leu
361 1               5
364 <210> SEQ ID NO: 3
365 <211> LENGTH: 4
366 <212> TYPE: PRT
367 <213> ORGANISM: Artificial sequence
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Input Set : **A:\CHL-T104XC1.ST25.txt**
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369 <220> FEATURE:
370 <223> OTHER INFORMATION: Illustrative peptide
372 <400> SEQUENCE: 3
374 Gly Pro Gly Pro
375 1
378 <210> SEQ ID NO: 4
379 <211> LENGTH: 25
380 <212> TYPE: DNA
381 <213> ORGANISM: Artificial Sequence
383 <220> FEATURE:
384 <223> OTHER INFORMATION: Primer
386 <400> SEQUENCE: 4
387 ccgtcgacgt agagaagtcc gtatt 25
390 <210> SEQ ID NO: 5
391 <211> LENGTH: 27
392 <212> TYPE: DNA
393 <213> ORGANISM: Artificial Sequence
395 <220> FEATURE:
396 <223> OTHER INFORMATION: Primer
398 <400> SEQUENCE: 5
399 gcccatggta aaatcttggt ttattta 27
402 <210> SEQ ID NO: 6
403 <211> LENGTH: 28
404 <212> TYPE: DNA
405 <213> ORGANISM: Artificial Sequence
407 <220> FEATURE:
408 <223> OTHER INFORMATION: Primer
410 <400> SEQUENCE: 6
411 cctttaaaaa gccttccatt ttctattt 28
414 <210> SEQ ID NO: 7
415 <211> LENGTH: 25
416 <212> TYPE: DNA
417 <213> ORGANISM: Artificial Sequence
419 <220> FEATURE:
420 <223> OTHER INFORMATION: Primer
422 <400> SEQUENCE: 7
423 gccatggtaa aatcttggtt tatta 25
426 <210> SEQ ID NO: 8
428 <400> SEQUENCE: 8
W--> **429 000**
431 <210> SEQ ID NO: 9
432 <211> LENGTH: 5
433 <212> TYPE: PRT
434 <213> ORGANISM: Artificial Sequence
436 <220> FEATURE:
437 <223> OTHER INFORMATION: Synthetic peptide
439 <400> SEQUENCE: 9
441 Ala Val Gly Val Pro
442 1 5

VERIFICATION SUMMARY DATE: 09/03/2004
PATENT APPLICATION: **US/09/807,742B** TIME: 11:05:50

Input Set : **A:\CHL-T104XC1.ST25.txt**
Output Set: **N:\CRF4\09032004\I807742B.raw**

L:429 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (8) SEQUENCE: